How to use

RADIO IN THE CLASSROOM

1939

A COMMITTEE OF TEACHERS AND RADIO EDUCATORS IN ASSOCIATION WITH THE EVALUATION OF SCHOOL BROADCASTS OHIO STATE UNIVERSITY, COLUMBUS, OHIO

PUBLISHED BY
The National Association of Broadcasters
Washington, D. C.

Printed material
box 47

How to use RADIO IN THE CLASSROOM

By

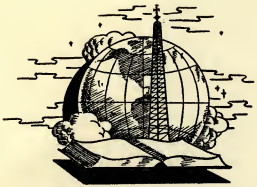
H. S. BUSBY, Atlanta, Ga.
NORMA BURDOCK, Detroit, Mich.
MELDA CHAMBRE, Flemington, N. J.
MARGARET COLLINS, Hackettstown, N. J.
JEAN FRIEDBERG, Chicago, Ill.
LILLIE GLEMBOTSKI, Quakertown, N. J.
ANNE O. GOTTSCHALK, Chicago, Ill.
LILLIAN HANSON, New Rochelle, N. Y.
MYRTLE F. HUNT, Lambertville, N. J.
KATHLEEN LARDIE, Detroit, Mich.
IRENE LASZEWSKI, Cicero, Ill.
DOROTHY MICHELS, Detroit, Mich.
MRS. HELEN MOORE, Detroit, Mich.
JANE E. MONAHAN, New York, N. Y.
RITA NEYLON, West Granby, Conn.
RUTH OTT, Zion, Ill.
FLORENCE N. ROWE, Point Pleasant, N. J.
FLORENCE E. SUTPHIN, Neshanic, N. J.
W. E. SWARTHOUT, Maywood, Ill.
KIMBALL WILES, Columbus, Ohio

Under the general supervision of
Norman Woelfel
Evaluation of School Broadcasts*
Ohio State University

* A research study sponsored by the Federal Radio Education Committee of the Federal Communications Commission to study the educational values of school broadcasts in elementary and secondary schools. Professors I. Keith Tyler and J. Wayne Wrightstone are Director and Associate Director, respectively.

Published by
THE NATIONAL ASSOCIATION OF BROADCASTERS

Copyright, 1939, The National Association of Broadcasters, Inc.



"IT IS worth any trouble it takes to rearrange and organize the high school or college schedule these days to enable the students to hear first hand the most important pronouncements being made by history-making leaders. The student who missed hearing Chamberlain or Hitler because he was forced by an inflexible school program to conjugate German verbs or to report on the Elizabethan period of English history, was deprived of some real education."

DR. JOHN W. STUDEBAKER
U. S. Commissioner of Education

I DOUBT if there has been a more penetrating and important radio study made than "How To Use Radio In the Classroom". It is at once a challenge to all broadcasters, whether we be licensees, radio educational directors, or teachers in the classroom, alert to the new influences about us.

It points out anew, and with a rare degree of thoroughness, what discriminating and intelligent use of radio can bring to the classroom and to the student in after-school hours.

I will not endeavor to sustain the point here. I ask only that the most skeptical read these observations, independently made by a group of teachers who voluntarily sought to find "How To Use Radio In the Classroom."

The National Association of Broadcasters and its member stations are proud to bring their report into national circulation.

Sincerely,

President,

The National Association of Broadcasters.

Washington, D. C., 1939.

OUTLINE OF Contents

1. Does Radio Have a Place in Education?
2. What's On the Air?
3. How Can We Fit Radio Into the Curriculum?
4. What About Equipment for Classroom Listening?
5. How Shall We Select School Broadcasts?
6. How Prepare To Use School Broadcasts? (Some examples.)
7. Is Out-Of-School Listening Important?
8. What Part Can the Teacher Play in the Planning of Educational Broadcasts?
9. How May Teachers Learn More About Radio in Education?

Preface

THE materials for this introductory handbook on the use of radio in the classroom were gathered by the persons named on the title page in the course of a six weeks' radio education seminar held in connection with the Progressive Education Association's Eastern Workshop at Sarah Lawrence College, Bronxville, New York, during the Summer of 1938. These persons, all of whom have had considerable experience in classroom use of radio programs, set for themselves early in the seminar the task of preparing a booklet that might stimulate wider use of radio by teachers and that would at the same time lay the foundations for more intelligent classroom radio utilization. The group divided itself into small committees, each of which undertook the responsibility for one or more of the present chapters. Miss Anne O. Gottschalk of the Chicago Public Schools Radio Council was chairman of the general committee and her help was indispensable in getting the project under way. Many committee conferences were held and a large amount of material was collected in the course of the six weeks. The task of preparing a preliminary draft of the booklet fell to Miss Jean Friedberg of Chicago and Mrs. Helen Moore of the Detroit Public Schools. These two teachers worked tirelessly throughout a hot and sultry week editing and re-writing the various chapters until a really integrated document emerged. The handbook in its present form is a second revision of the original material. Various fellow-members of the Evaluation of School Broadcasts staff as well as teachers and radio-educators have made invaluable criticisms and suggestions which have been embodied into what has been a truly cooperative effort.

The handbook offers suggestions to teachers who are interested in using radio in their classrooms. It is intended to be introductory and provocative rather than comprehensive and conclusive. Because the practice of using radio in the classroom is relatively new, and because learning content will vary each time a new radio program comes into the schoolroom, a handbook of this type can hardly do more than recommend general procedures. A great deal of the success of using radio in school depends upon the adaptability of the teacher, her insight into the implications of educational radio and her understanding of where, when, and how to serve the educational needs of the boys and girls in her classroom.

NORMAN WOELFEL,
Ohio State University.

ONE

DOES RADIO HAVE A PLACE IN EDUCATION?

HOW can I make far-away situations seem near and real to the boys and girls in my classroom?

How can I help boys and girls realize the excitement and drama of past events?

How can I become less formal and conventional as a teacher?

How can I help boys and girls to an intimate knowledge of their community?

How can I bring more of the outside world into the schoolroom?

How can I help boys and girls develop broad, satisfying and lasting interests?

These and similar questions are constantly arising in the mind of every teacher. There is no single comprehensive answer. Our degree of success in solving such educational problems depends upon the best possible use of whatever teaching techniques and materials seem to be of greatest help. Teaching techniques change and multiply and become increasingly effective. Radio is one of the newer techniques which is rapidly becoming a very potent force in helping teachers achieve the broader purposes of education.

There are certain unique aspects of radio which are not found in most other aids to learning. First and most important of these is radio's ability to bridge the gap of space. Radio can bring the world to the classroom, enabling pupils to participate in and actually experience international, national, regional, and local situations of great scope and significance. History-making political events, discussions and interpretations of the news, conferences, debates, forums, and talks by authorities in every field may now by means of radio become part of the school curriculum.

The qualities of timeliness and authenticity, which are concomitants of this space-conquering aspect of radio, are factors of vital educational consequence. Fresh, first-hand accounts or spot broadcasts of events at the time they are happening may be depended on to motivate and enliven later reading in magazines and books. In no more economical way may leaders in all forms of human endeavor be made universally available to bring to the classroom reliable information and varying points of view.

THE dramatic and imaginative quality inherent in the spoken word underlies radio's greatest contribution to the general process of education. The radio broadcast can make instructional material which is ordinarily considered remote from actual experience and hard to grasp take on new and vital significance by the technique of spoken drama. Thus radio is enabled to expand the emotional and intellectual horizons of young people. Radio can remove the haze of unreality surrounding historic events and persons and enable pupils to re-live history imaginatively. Radio can make travelogues out of geographic materials, transporting the listener vicariously to the actual scene, and investing distant everyday life with a quality of reality that no written account could ever approach.

Many phases of modern life difficult to present through our ordinary schoolroom methods are adaptable to this dramatic technique. Such activities as civic government, social welfare, new developments in science and technology, on which only a small amount of graded reading material is available, may be presented effectively by means of radio. In the purely cultural or aesthetic fields of literature and music the contributions and possibilities of radio are too obvious for further comment.

It seems clear that radio can bring to most present-day classrooms educational and cultural materials which no classroom teacher, because of limitations of both time and ability, could prepare for herself. Frequently a fifteen-minute educational radio program involves many hours of preparatory research and many varieties of specialized talent, before finally being broadcast as a powerful teaching force.

Thus, without question, radio promises to fill a real need in education. The realization of this promise, however, depends ultimately upon the attitude of the teacher toward radio and upon the amount of intelligence she bestows upon her plans for its utilization in the classroom.

TWO

WHAT'S ON THE AIR?

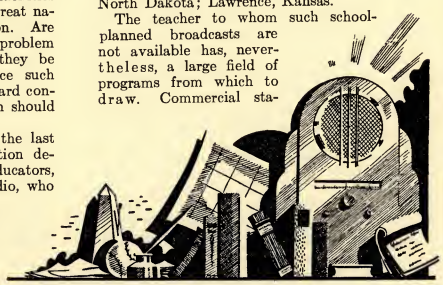
THEORETICALLY, the potential value of radio to education is as unlimited as the potential value of the written word. It is essentially only a new means of communication, and we may do with it, within certain limitations, almost anything we wish. Practically, however, as a teaching tool, radio is no better or worse than the programs currently available on the air. For example, a teacher may be not only willing, but eager to use the facilities of radio in teaching about the great national problem of conservation. Are there programs dealing with this problem available? If not, when will they be available? Who should produce such programs and what attitude toward controversial aspects of the problem should go on the air?

A number of cities have, in the last few years, set up radio education departments with a staff of educators, trained in the techniques of radio, who write and produce programs designed to fill the needs of teachers in their own school systems. Some states, notably Wisconsin and Ohio, have set up similar statewide departments. This broadcasting is carried on in some cases over stations operated by school systems, and in others by local commercial stations who donate the time on the air. For teachers to whom such broadcasts are available the problem of using radio is greatly simplified. This includes, of course, not only members of the particular school system for which the radio programs are designed, but teachers in outlying districts or other cities close enough to pick up the broadcasts.

School broadcasting is undoubtedly more effective when the basic planning is done by professional educators who are familiar with the degree to which curricular objectives are being attained and with the actual needs of the classroom teacher. We are, however, a long way from even partial fulfillment of this condition. The acceptance of the radio department as an important adjunct of the school system must wait upon a more complete awareness of the contributions which radio can make to the school program.

AMONG cities and school systems which have pioneered in developing radio education departments are New York City; Rochester, New York; Atlanta, Georgia; Indianapolis, Indiana; Cleveland, Ohio; Detroit, Michigan; Akron, Ohio; Chicago, Illinois; Alameda, California; Los Angeles, California; Brookings, South Dakota; Grand Forks, North Dakota; Lawrence, Kansas.

The teacher to whom such school-planned broadcasts are not available has, nevertheless, a large field of programs from which to draw. Commercial sta-



tions schedule two types of programs: Sponsored programs, or those which are put on as part of an advertising campaign by private business firms, and sustaining programs put on by the station or network itself as contribution to public service. Many of these sustaining programs are definitely planned as educational programs for adult audiences. Two of the major radio networks, the National Broadcasting Company and the Columbia Broadcasting System, as well as a number of the local stations, maintain educational directors and educational departments by whom extensive program series in all of the arts applicable to radio and dealing with the entire range of human interest are planned. It should be noted that many programs in the sustaining class are put on by public service agencies and organizations during free time donated by commercial stations.

THE Columbia Broadcasting System has developed the American School of the Air. This is a special department which cooperates with prominent educational organizations in building radio programs suitable for use in the classroom. These programs, available to all commercial stations affiliated with the Columbia Network, are on the air every week day during the school year from 2:30 to 3:00 P. M., Eastern Standard Time. They cover background material in social studies, literature, music and science, and are directed to intermediate and secondary grades. A manual outlining and describing these programs may be obtained from the American School of the Air, 485 Madison Avenue, New York, New York.

The National Broadcasting Company on successive days between the hours of 2:00 and 3:00 P. M., Eastern Standard Time, broadcasts over most of its affiliated stations background programs in literature, science, health and social studies. In addition this network offers, during school time, one hour weekly of the famous Damrosch Music Appreciation Series, and a half-hour weekly of Professor Maddy's instruction on the playing of band instruments. Manuals, instruction booklets, or pupil leaflets for use in connection with these broadcast series may be obtained from the National Broadcasting Company, 30 Rockefeller Plaza, New York, New York.

Station WLW in Cincinnati, Ohio, produces the Nation's School of the Air. The Mutual Broadcasting System now carries the Nation's School of the Air programs over many of its affiliated stations.

Obviously there are many programs not actually planned for school consumption which have educational value, such as newscasts, spot broadcasts, roundtables and dramatizations. A teacher can obtain more detailed information about available educational broadcasts in the following ways:

1. By writing to the educational departments of the National Broadcasting Company, Columbia Broadcasting System, and Mutual Broadcasting System and to the individual stations for more complete information about educational programs.

2. By consulting *Radio Guide*, a ten-cent weekly periodical obtainable at local newsstands and magazine stores.

3. By consulting such selective listings as:

   (a) *The Radio Calendar*, issued by the American Association of School Administrators, National Education Association, Washington, D. C.

   (b) *The Radio News Letter* and the *Radio Bulletin* issued regularly by the Los Angeles City School District, Los Angeles, California

   (c) The *Program Bulletin* issued by the Radio Council of the Chicago Public Schools

4. By consulting daily and Sunday newspaper radio columns.

5. By requesting material from local radio stations about available educational broadcasts.

NOTE: For a more complete list of institutions and organizations concerned

with radio in education consult the appendix to *Radio in the Classroom* by Margaret Harrison, Prentice-Hall, Inc., New York, N. Y.

THREE

HOW CAN WE FIT RADIO INTO THE CURRICULUM?

TO THE teacher whose curiosity about radio as a classroom technique has led her to listen critically to a number of educational broadcasts and tentatively to select a given program series as peculiarly fitting for her classroom in one subject area, the next problem becomes that of making the necessary adjustments in the school schedule so that the broadcast time could be freed as a classroom listening period. This rescheduling is relatively easier for the elementary school teacher who teaches all the main subjects and has the same boys and girls under her guidance during all or the greater part of each day, than it is for the elementary or high-school teacher who teaches but one subject and whose students change from hour to hour of each day.

In the latter case, it will be possible for only one class to hear the broadcast and it may be necessary to change the course of study requirements for the class listening to the radio program. In any case, the whole plan of instruction for that particular class will probably be upset. It may as well be assumed that the regular use of a school radio program will necessitate major readjustments in the teaching plan. The teacher using radio will begin to ask herself questions like the following: How long shall classroom discussion of the radio program continue after the program has been audited? Shall assignments be made in terms of the radio program? What instruction is of most worth? What shall be done about questions raised in the children's minds by the radio programs which are new to the teacher and for which she has little or no information? How shall the necessary supplemental material to the radio program such as pictures, maps, tables, be gathered and used?

AS SUCH questions multiply and refuse to answer themselves readily many teachers may become profoundly discouraged with the complexities of the situation. Against this discouragement the intelligent teacher will need to balance the significant positive assets of radio, and then with renewed vigor seek solutions to the particular difficulties she has been confronted with. She will weigh, for instance, radio's possible function as an integrating medium between the almost infinite array of school subjects so seemingly isolated from one another. Ordinarily, the neat little bundles of abstract generalized information labelled arithmetic, geography, history, art, etc., bear little promise even under a skillful teacher of yielding to most children an intelligent understanding of life as it is lived today. Life is not made up of compartmentalized abstractions.

How can history and geography and mathematics and literature be integrated in the classroom as they are in life? The presentation of an historical episode or the reporting of present-day world shaking events on the international front by modern radio techniques is usually a creative composite drawing upon all subject-matter disciplines and comes into the classroom with all of the variety, the flavor, and freshness of life itself. The radio program cleverly used becomes a life center toward which laws, principles, and meanings of the various subject-matter fields are drawn as explanatory factors in truly educational fashion. The vista of educational progress made possible by the development of educational radio techniques and the intelligent utilization of radio in the classroom is a broad one toward which little definite progress has been made.

THE field of experimentation with radio is wide open and only as individual teachers all over the land bend

pioneer efforts in learning efficiently to utilize this new technological tool of instruction will its real value be demonstrated. The teacher who thinks in terms of education as effective living will not hesitate to attack vigorously such obstacles as re-scheduling her instructional program or advocating curricular revision in order to fit radio in.

FOUR

WHAT ABOUT EQUIPMENT?

IT SEEMS unnecessary for the purposes of this booklet to go into the technical problem of equipment for classroom radio reception except to make a few general suggestions. *Radio will naturally serve the purposes of education best when there is a receiving set in every classroom.* Frequently, however, a number of classrooms may temporarily find it necessary to use the same radio. This can readily be done if each teacher plans in advance the programs she wishes to use with her class and consults with the other teachers with whom she must share use of the radio.

Auditorium listening, or listening in a crowded classroom, are generally unsatisfactory. Bad acoustics, difficulty in controlling volume so that it is satisfactory both to those near the radio and also to those farther away, discomfort due to crowding, all distract from the value of the program. Best results seem to be secured when children listen in their own classrooms, in a natural situation, with classroom materials at hand. The proper tuning of the classroom radio should be assigned to a radio-minded boy who understands the various adjustments.

Listening in a rural school is complicated by the fact that the teacher must of necessity consider children of various ages and grade levels. One solution to this problem might be to place the radio in an anteroom or hall and allow the group who would benefit most by the program to listen there. If no anteroom is available, a corner of the classroom might be used, with the radio turned low enough to avoid, if possible, disturbing other children. This arrangement is far from ideal, of course, but the enrichment that radio can give to the rural school curriculum definitely outweighs such difficulties.

Rather than supply a radio for each classroom some of the larger schools in the country have purchased a central receiving set which serves an entire building. Briefly, this consists of a receiving and broadcasting unit usually located in the administrative office, with a receiving outlet in every room. Radio programs, phonograph records, and programs or announcements originating within the school may be broadcast over the system, reaching any or all of the classrooms.

The number of radio programs which may be used in the building at any one time depends on the number of channels provided for in such a unit. Since most of the centralized systems are of the one-channel type this usually results, in so far as radio reception is concerned, in the same situation that would arise with one portable radio in the building. In addition, some persons feel that teachers will not make as complete use of radio when it is necessary to make arrangements through the administrative office to tune in as they would if the radio were a regular part of their classroom equipment. On the other hand, proponents of the central equipment system feel that these objections are more than offset by the multitude of teaching uses to which centralized radio sound systems, especially of the several channel type, can be adapted.

THE relative merits of central receiving over individual receiving equipment is admittedly a controversial one. The issue, however, seems to boil down to this: If the purpose of the equipment is to enable the teacher to make as complete use of radio as possible, that purpose will best be met by a radio re-

ceiving set in the classroom. If the purpose is to provide opportunity for children to use a public address system, to provide a communication system for the school, and to enable teachers to use radio programs in somewhat limited fashion, then that purpose will best be met by central receiving equipment.

NOTE: For a more complete discussion of this problem see *Radio-Sound Equipment for Educational Use,* by R. R. Lowdermilk, Bureau of Educational Research, Ohio State University, Columbus, Ohio.

FIVE

HOW SHALL WE SELECT SCHOOL BROADCASTS?

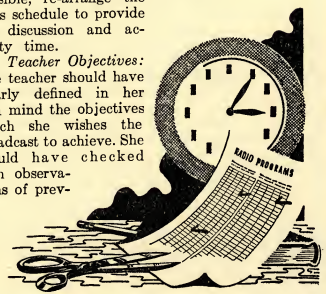
ALTHOUGH there is a great deal of valuable educational material on the air, it is not all useful in all situations. Almost as much depends on the proper selection of a program as on the quality of the broadcast itself. The teacher, who knows her own group, is most capable of making decisions on the basis of that group's needs and interests. This applies to both school system and commercial broadcasts, although it is perhaps more important in the case of the latter, because they can not always be planned in terms of local curricular requirements.

How can the teacher become informed about broadcasts before she uses them in her schoolroom? Frequently the teacher is not free to listen without her class. It is rarely possible to know ahead of time in any great detail what a broadcast is going to contain. There are certain means of checking, however, which the teacher can and should use. Where the broadcast is educational, manuals, study aids, and descriptions issued before the broadcast are helpful. Some statement of the policy and purposes of the sponsoring station, institution, or organization can usually be obtained. Information as to the nature of the program can frequently be obtained from the radio station on request. Radio magazines and educational radio bulletins issued by the major networks and local stations also contain helpful information.

Following are some of the elements which teachers have found helpful in selecting a broadcast for school use:

a. Time: The broadcast should be on the air at a time during the school day when major administrative adjustments will not be necessary in order that the program may be heard. The program should fit into the scheduled periods easily, unless it is possible to make satisfactory arrangements with other teachers for exchange of classes.

b. Length of Program: Since the realization of the educational possibilities of radio depends upon concentrated listening, broadcasts of 15 minutes duration are probably preferable to those of a half-hour's duration. This is particularly true with younger children. The teacher herself can best judge what length program is most satisfactory for her group in terms of the children's interests, attention spans, and physical needs. Because an integral part of the process of radio listening is the discussion or activity before and after the broadcast, the broadcast should not take up too much of the class period. A great deal of the benefit of the broadcast is lost if the class has to disband immediately after the program. While it is impossible for the teacher to govern the actual length of the program, she can choose programs which are of appropriate length, or, if possible, re-arrange the class schedule to provide for discussion and activity time.



c. Teacher Objectives: The teacher should have clearly defined in her own mind the objectives which she wishes the broadcast to achieve. She should have checked with observations of prev-

ious broadcasts, public announcements, and any supplementary lesson manuals in order to judge clearly the ways in which the objectives she has chosen are to be served. She should know whether or not the broadcast is designed for classroom use, what subject-matter content it aims to cover, and what social attitudes it seeks to influence. Those broadcasts should be selected which are, or can be made, relevant to the work going on in the classroom. Occasional exceptions to this are newscasts, actuality or spot broadcasts, foreign broadcasts, and special events broadcasts. There may be cases in which the teacher knows that her objectives and those of the broadcast differ. Under these circumstances she should plan such a utilization of the program as will best serve her objectives.

d. Quality of Performance: The teacher should select programs which are presented as effectively as possible in terms of the purposes she has determined upon. She must guard against the danger of selecting programs so poorly executed and presented that they may hinder the use of radio as a teaching device. No matter how worthy the content and objectives, a radio program is ineffective if poorly presented. The broadcast should be conceived and produced primarily in terms of the best modern radio techniques. That is to say, the broadcast material should be so chosen and assembled that it is more effective over the radio than if produced through some other educational medium such as the theatre, lecture hall, or classroom. When the broadcast attempts direct teaching, simplicity and vividness of terminology are prime requisites.

e. Interest: The material of the broadcast should be based on the interests of the students, and should serve to stimulate new interests as well as to deepen those already present. The arousal and maintenance of a high degree of spontaneous interest on the part of most listeners to the broadcast should be evident before any broadcast series is used regularly for school listening.

f. Authenticity: The teacher should use every means available to her for checking the authenticity of the broadcast content. She should know the source of the broadcast: if educational, what institutions are sponsoring it; if commercial, what organizations are using it and for what purposes. She should check the material of previous broadcasts from the same or similar sources. She should know how to help the students find references to corroborate, develop, or disagree with the material as presented.

SIX

HOW PREPARE TO USE SCHOOL BROADCASTS?

NO SCHOOL broadcast can be evaluated apart from its utilization in the classroom. The preparation for the broadcast, the broadcast itself, and the discussion and follow-up activities which it stimulates should be considered as the component parts of a single classroom unit.

Preparation for the broadcast may involve several activities on the part of the teacher. In the first place, she must prepare herself. She should know the purpose of the broadcast and plan her approach accordingly. She should familiarize herself, as far as possible, with the form and content of the program. She should know what resources in the way of books, visual aids, and other supplementary materials are available. If the program is designed to direct some pupil activity such as singing or rhythm work, she should know in advance what directions are likely to be given and how they should be followed, so that no time may be lost when the directions actually come over the air.

It is important, of course, for the teacher to see that the radio is properly tuned to the station before the broadcast begins and that the dial is manipulated during the performance whenever necessary for maximum clarity and tone quality. This is an activity which, in many cases, can be handled by a pupil monitor who is familiar with the mechanical adjustments on radio sets.

The amount of preparation which the children should have will depend to a large extent on the type of program to be presented. Some programs may best be used as a climax to a series of activities or a unit of work. In any program where the content may be unfamiliar to the children, enough experiences should be planned beforehand so that the broadcast will be as meaningful as possible to them. This may include clarification of unfamiliar words or terms, reading, research, reports, discussions, or handling of visual aids. In a travelogue, a study of the map of the particular area to be covered might well precede the broadcast.

On the other hand, there may be programs which are a taking-off point, designed to stimulate interest in a new field. Here the major emphasis would be upon post-broadcast activity. A dramatization of the housing problem might be an example of such a program. Preparation would involve little more than setting the stage for listening, with the program acting as the stimulus to a study of the problem.

No factor is more important in determining the effect of a broadcast on children than the attitude of the teacher. The class will, in most cases, be as enthusiastic or as indifferent as she. The teacher who obviously looks forward to hearing the program, listens attentively and shows her enjoyment, gets far better results than the one who turns on the radio and then corrects papers or looks out the window while the program is on.

Various techniques may be used to make listening more effective. Generally speaking, anything that will tend to distract the attention of the listeners should, if possible, be eliminated. On the whole, the less activity in the room the better, except during those broadcasts which give directions for the children to follow. Showing pictures, pointing to maps and so forth should usually be done either before or after rather than during the program.

Any minor adjustments which will remove strain and make listening more pleasant should have been made before the program is turned on. Providing a well-ventilated room, reseating children so that those who have difficulty in hearing are near the radio, adjusting shades, and making sure that there will be no interruptions all make for more effective listening.

EXPERIMENTS tend to show that pupils who take notes during broadcasts do not assimilate and retain as much of the content as those who devote their whole attention to listening. This is particularly true of elementary school children where lack of skill in writing and spelling makes note-taking a slow process. Writing during a broadcast with the purpose of reproducing parts of the content should certainly never be a forced activity. If statistical or specific factual material which may be valuable later is given, the teacher may wish to write this down herself. During certain types of broadcasts, however, pupils should feel free to jot down questions which arise in their minds or points which they wish to discuss later.

The activities arising from a broadcast will depend on the teacher's purpose in using it, its value for the children, and the degree of interest it has aroused. Certain types of programs may lead to much more discussion than others. The teacher may wish to emphasize or enlarge certain points, or help the children to clarify issues that have been raised. A good discussion period is rarely one that attempts to check on pupils to see how much of the content of the program they have retained. Such discussion should, rather, arise naturally from the children's interest in the subject and their desire to talk about it.

The teacher can also, through discussion periods, help to develop a critical attitude in pupils toward points of view expressed in radio programs. This is probably more important with reference to out-of-school than to in-school listening. Children should learn not to accept blindly whatever they hear on the radio. The person who is able to think critically and to evaluate opinions and sources of information will be most capable of dealing intelligently with life situations. Development of this ability is one of the principal objectives of education.

The very fact that radio is a widespread means of dispensing information necessitates its use by the teacher as an effective device for the attainment of discriminative listening.

Other pupil activities which a broadcast might stimulate will, of course, vary with the type of program and material presented. They may include reading and research, writing reports, collecting exhibits, performing experiments, dramatizations, debates or forums, taking trips, or any classroom activity which might be stimulated by any other means.

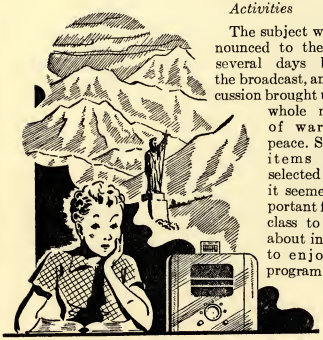
Following are several sample accounts of the utilization of school broadcasts. These are presented here not as representing complete or perfect specimens of radio utilization, but only as suggestive examples of what was actually done by certain teachers or certain schools.

EXAMPLE A

Fifth Grade

Program

"The Sign of Peace," one of a series designed for elementary grades. The program was a dramatization of the events in Argentina and Chile which led to the peaceful settlement of their difficulties and to the erection of the statue called "The Christ of the Andes" on the border as a symbol of peace between the two countries.



Pre-Broadcast Activities

The subject was announced to the class several days before the broadcast, and discussion brought up the whole matter of war and peace. Several items were selected which it seemed important for the class to know about in order to enjoy the program more fully. Pupils looked up material on these points and presented them in the form of reports during the period just preceding the broadcast. Parts of their reading, writing, English, or library periods were used for this activity.

Reports were given on the following subjects:

1. A discussion of the meaning of certain words, such as "arbitration," "munitions," etc.
2. A brief survey of the geography of Argentina and Chile
3. A brief review of the history of the two countries
4. Facts about the Statue
5. The League of Nations
6. The World Court
7. The Pan American Union.

Post-Broadcast Activities

The class had been asked to talk over with their parents the question of what the United States should do to avoid war, and during the discussion after the broadcast opinions were expressed on these, as well as other points.

1. The conquest of Ethiopia
2. The invasion of China—the Panay incident
3. The war in Spain
4. The Monroe Doctrine
5. The Pan-American Union
6. The part munition makers play in war
7. The effect of martial music and propaganda in time of war
8. The big navy question—could this country ever be successfully attacked?
9. The League of Nations and the World Court
10. Fascism
11. The question of isolation or cooperation as the best foreign policy for this country
12. Should the United States protect foreign investments in war zones?

Several days later a group of children wrote and presented in broadcast form a short play dramatizing events of the war in Spain, and two boys asked for and received permission to hold a debate on the respective merits of isolation or cooperation as the foreign policy of this country.

Comment

The *activities* growing out of this broadcast are a good example of the integrating possibilities of radio. From the point of view of subject matter, geography, history, civics, English, reading, spelling, writing, dramatization, and public speaking all entered in. A great deal of pupil research and investigation was done, and an appreciation of such institutions as government bodies and peace organizations, a new interest in and a better understanding of several major social problems, critical thinking about these problems, and tolerance toward each other's opinions were all developed to some degree.

EXAMPLE B

Rural School, Fifth Through Eighth Grades

Program

"Istanbul, a Decapitated Capital," one of a series designed to supplement the work in upper elementary geography classes. The broadcasts dramatized the travels of an American family in foreign countries.

Pre-Broadcast Activities

Since the children had not been studying this part of the world in their regular class work, it was necessary to lay a rather careful foundation for listening. Such activities as these were found valuable.

1. Map study of the area in which the scene was laid
2. Appointing a committee to mark places in books where information about the subject could be found (Supplementary reading was carried on by children in their spare time)
3. Setting up an electrical stereopticon machine with pictures of the region
4. Teaching the meanings of such words as "Mohammedan," "mosque," "minaret," etc.
5. The mother of one of the pupils had lived in Istanbul as a child, so she was invited to listen to the program with the class

Post-Broadcast Activities

1. During the discussion following the broadcast these and other points came up:
   - Reasons for moving the capital
   - Reasons for the long dry summer
   - Why the Black Sea has bad storms in summer
   - What effect the geography of the country has had on the customs of the people
   - The Mohammedan religion
   - Westernizing influences in the East
   - The Turkish Youth Movement
2. Several of the children read for more information on phases of the topic in which they were particularly interested
3. A collection of sample products of Turkey was made
4. One of the children made a puppet dressed in the native Turkish costume

Comment

The program succeeded in giving the pupils the feeling that Turkey was a place where real people lived rather than something on a map in a geography book. They gained some familiarity with the customs of the country and a more sympathetic understanding of its problem.

EXAMPLE C

Seventh Grade

Program

A dramatized story of the discovery of vitamins A, B, C, D, and G. This was one of a series intended primarily to serve as a factor in integrating classroom activities in different subject matter fields.

Pre-Broadcast Activities

Interest was first aroused by a discussion period several days before the broadcast during which the teacher mentioned several startling instances of the effects of various kinds of food on human beings and animals as shown in the relation of nutrition to such diseases as beriberi, scurvy, and pellagra. The children were encouraged to tell instances from their own experience of the importance of the right kinds of food. Some reading, reports to the class, and discussion were engaged in to make sure that the children would be sufficiently familiar with the content of the program to appreciate it.

Post-Broadcast Activities

1. Individual children read and reported to the class on the following subjects:
   a. Vitamins—what are they? How, when and by whom were they discovered?
   b. What is meant by the term "calory" in relation to food?
   c. Nutritional diseases; pellagra, scurvy, beri-beri
   d. The experiment of Sir Robert McCarrison in which he showed that racial characteristics may be due to national diets
   e. The importance of milk in the diet
   f. Diet in the treatment and prevention of tuberculosis
   g. Famous scientists and their contribution to our knowledge of the relation of food to health
   h. The effect of mental states on digestion

2. In the Home Economics class the girls made a study of balanced meals and reported their findings to the boys

3. The lunchroom supervisor was consulted and an article written for the school newspaper containing such facts as how the lunches are planned, the care exercised in selecting the food, cost of operating the lunch room and suggestions for lunch room behavior

4. In the Art Room posters were made to hang in the lunch room. These contained suggestions for healthful lunches, correct eating habits, the necessity for cleanliness, etc.

Comment

The successful way in which this program was used to *stimulate* interest in the problem of food and its relation to the general health problems of children was possible because of close cooperation between the Home Room teacher and special teachers in home economics and art. Thus three teachers, each with different backgrounds and different experiences with the same children were able to plan together a series of activities many of which had significance beyond the classroom.

EXAMPLE D

A proposed plan of utilization for an entire music series in a platoon school.

Program

A weekly series of radio music programs planned by a city school system for use in intermediate grades.

Pre-Broadcast Activities

1. *Home Room*
   Pupils will read reference material to be found in books available in every Home Room. These references will include:
   a. Stories of operas, oratorios, and suites
   b. Stories of the lives of famous composers
   c. Other interesting stories relating to the music heard in the broadcast
2. *Library*
   Pupils will read specific references directly relating to the broadcast such as:
   a. Development of instruments
   b. Lives of composers and musicians
   c. Stories of operas, oratorios, and suites
   d. Information about musical forms
   e. Information about the organization of ensembles, choruses, orchestras, bands, and other musical groups
3. *Auditorium*
   Pupils will listen to victrola records directly relating to the broadcast in order that they may become familiar with:
   a. Types of music to be presented
   b. Kinds of instruments to be played
   c. Types of voices to be heard
   d. Organization of ensembles (duets, trios, quartettes, choruses, orchestras and bands.)

   Pupils will also discuss prepared materials pertaining to the broadcast
4. *Music Room*
   Pupils will sing songs related to the broadcast

Pupils will sing or hum themes for compositions to be played in order that they may become familiar with the content of the program
Pupils will discuss all necessary information for enjoyment and understanding

Post-Broadcast Activities

1. *Home Room*

   Pupils will discuss very briefly their reactions to the program and be allowed to write their personal reactions if they wish to do so

2. *Library*

   Pupils will be allowed to read books or periodicals which they may desire as a result of interest stimulated by this broadcast

3. *Music Room*

   Pupils will be allowed to learn new song material requested as a result of this broadcast
   Pupils will be encouraged to develop better listening habits at home
   Pupils will be encouraged to organize small ensembles with the hope that they may be chosen to participate in a program of this radio series

   Pupils will discuss:

   a. Manner in which the program was presented
   b. Quality of performance
   c. Suggestions for improving future broadcasts
   d. Ways in which the class can improve their own work

4. *Art Room*

   Pupils will be encouraged to express their reactions through any art media which they may desire such as:

   a. Soap carving
   b. Clay modeling
   c. Finger color pictures, sketches, drawings, etc.

5. *Auditorium*

   Pupils will discuss the broadcast:

   a. Content of program
   b. Quality of performance
   c. Ways of bettering the program

   Pupils will be allowed to dramatize incidents which they may desire to

SEVEN

IS OUT-OF-SCHOOL LISTENING IMPORTANT?

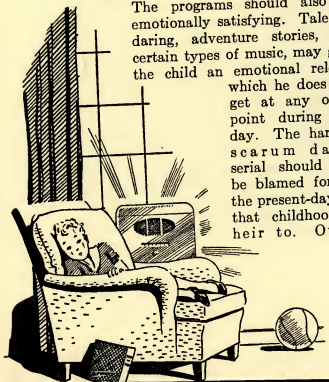
a. *What should be the teacher's attitude toward out-of-school radio programs?* Because listening to the radio has become a very important item in the leisure-time activities of the child, the teacher who views him as a twenty-four hour rather than an eight-thirty- to three-o'clock person recognizes that this implies some understanding, some cooperation, and, most of all, some activity on her part. *To condemn, ignore, or deplore out-of-school listening does not contribute toward solving the problems involved.* Because it has become an integral part of his life the child should be helped to get from this listening the most possible benefit and pleasure. The approach of the teacher should be positive rather than negative; that is, she should build upon what is already present in the child rather than attempt to uproot existing tastes or attitudes. It is important here as elsewhere that the child maintain his confidence in the teacher as a person who is interested in him and who respects him. This positive attitude can be achieved by recommending interesting "good" programs rather than discrediting "bad" ones.

Out-of-school listening falls into two main classifications: leisure-time listening for "pure enjoyment," and listening for reference material to supplement school work. These two are not necessarily mutually exclusive. It is conceivable that leisure-time listening for "pure enjoyment" could be utilized in school to motivate discussion of advertising techniques, as a basis for analysis of what makes a story interesting or exciting, and for discussion of what constitutes a good radio program. Correspondingly, if school activities are actually meeting the needs of the child, any supplementary material heard over the radio would be "enjoyable."

We know that the appeal of out-of-school programs is very great because the child listens voluntarily—without supervision—and usually without any direct motivation set up by adults. A high degree of auditory concentration is apparent because of other activities going on in the house or even in the same room.

The first requirement in out-of-school programs which are to be recommended for children is that they be based on children's interests. The material of the program should be closely related to their background and maturity level because these are the basis for inherent interest. A good program should be one which promotes the continued interests and stimulates the further activity of listeners. Such interest and activity may take the form of intense, concentrated listening, recall and correlation of related experiences, imaginative elaboration, singing, dancing, dramatic play, hobbies, reading, and social welfare activities. *The very process of listening with one's family and discussing the program is an important social activity in itself.* It is also very probable that interest can be stimulated in fields hitherto unknown to or unexplored by the child.

Obviously programs should come at times when they do not interfere unduly with the child's outdoor play, his meals or his bed time. The teacher should be sure that the programs to be recommended have a high standard of technical perfection. They should be well organized, clear and understandable.



The programs should also be emotionally satisfying. Tales of daring, adventure stories, and certain types of music, may give the child an emotional release which he does not get at any other point during the day. The harum-scarum daily serial should not be blamed for all the present-day ills that childhood is heir to. Over-absorption in this type of program with attendant nervousness, night fears or other abnormal symptoms are frequently symtomatic of deep-lying maladjustments within the child which should be investigated.

The teacher is in a position to recommend programs that will fill the personal, physical, and emotional needs of particular children. Although radio programs are necessarily designed for mass consumption, teacher selection and teacher recommendations should be made on the basis of the needs of the individual child. For instance, a nervous, excitable child might listen to certain types of music before dinner, or a child having difficulty in occupying himself around the house might get valuable suggestions from listening to hobby programs. Choosing a suitable radio program is more difficult than choosing a suitable book, because there is less variety of materials to choose from. By keeping herself well-informed as to what is on the air, the teacher can, however, greatly aid the child in finding satisfying broadcast to listen to at home.

AN important criterion for judging the suitability of a radio program, is validity. If the content is fiction, are the people life-like? Are the situations plausible? Are they consistent within the total framework of the story? If the broadcast material is fantasy, is it presented as such or does it become confused in the mind of the child with real life situations? If the material is factual, what are the sources? Are they reliable? How is the material selected? Is it presented with integrity? Is it clear at what points the material has been altered for dramatic purposes? These are all questions which the teacher should be able to answer for herself before recommending a program.

Out-of-school radio programs used to supplement regular school activities should have several qualities not necessarily required in school broadcasts of a similar type. Since the radio is family property and a form of home reference material which has necessarily to be shared, educational programs should have enough general appeal so that the child is

not brought into conflict with his family when the school requests him to listen to them. Where it is desirable to use the actual subject matter from the program in the classroom, the program should be simple and clearly intelligible, because of the necessary interval between broadcast and follow-up. Listening to an out-of-school broadcast should be required rarely and then only if the material is highly relevant to classroom activities.

Music, drama, story, variety show, science, history and news programs may all on occasion be recommended by teachers. Many programs which are planned for adults are equally interesting to children. Before recommending any out-of-school radio program for boys and girls the teacher should ask herself the following questions:

1. Is the program based on children's interests?
2. Does it come at a suitable time?
3. Is it well presented technically?
4. Is it emotionally satisfying?
5. Does it meet the particular needs of the child or children for whom I am recommending it?
6. Is it valid?
7. Is it of general interest?
8. Is it closely correlated to our work in school?
9. Do the programs which I recommend present a variety of experience?

b. *How can contributions from out-of-school programs be utilized in the classroom.* Since the teacher is interested in the whole lives of the children and is anxious to make as close a correlation as possible between home, playground and school activities, she will want to examine the possibilities of out-of-school radio programs in helping her realize these purposes.

FREQUENTLY programs which may have a definite relation to work in the classroom come during out-of-school hours. Examples of these carried on nation-wide radio networks are: America's Heritage, Science on the March, The Story Behind the Headlines, America's Town Meeting of the Air, The World Is Yours, Men Against Death, Great Plays, Immigrants All—Americans All, and Cavalcade of America. Others may be selected from a careful study of the local station's program roster.

When is the teacher justified in making a definite assignment for out-of-school listening? To answer this question it is necessary first to answer several others. Does every child in the class have a radio in his home, or is there a place where he can go to listen? Obviously it is unfair to make an assignment when all the children are not equally equipped to carry it out. There is also the danger that the child without a radio will be made to feel inferior or ashamed. The organization of occasional listening groups in the home of the teacher or of a pupil might help. Is the program on the air at a time when it does not conflict with programs to which other members of the family regularly listen? It should be remembered that a radio assignment given to the child frequently means an assignment to the family as well. What is the relationship of the program to the regular classroom activities? This relationship should always be clearly apparent to the pupils as well as to the teacher.

Assuming that the students have equal opportunities for listening, that the assignment will not bring them into conflicts with their families, and that the material of the program is closely correlated with the work in school, how is the teacher to prepare for and follow up the broadcast?

Advance preparation cannot be as extensive as for school broadcasts because it is frequently impossible to get detailed accounts of the broadcast content in advance. The chief activity in preparing for an out-of-school radio program would perhaps be the defining of the purposes of listening, and a consideration of the questions the class would like the program to answer, or of the specific points the pupils expect to hear brought out. The teacher might also point out things to watch for. Follow-up activities might include a critical evaluation of the program, a sorting out of the material which is useful to the class, and a discussion of controversial points raised.

The teacher will want to make frequent recommendations about out-of-school radio programs which may serve as supplementary material in certain subject areas. Often these programs will not be

ones to which the whole class will care to listen. Individuals may volunteer to report upon them, or discuss them before the group. The class may wish to set up a committee to watch for and suggest interesting programs. A radio club might be organized to study and report on programs, do selective listening, discuss problems of radio production, collect and try to find the answers to questions about radio personalities and problems, or study the mechanics of radio broadcasting and receiving.

WITH the purely recreational type of program the teacher can do several things. She can be acquainted with suitable current programs. She can tactfully recommend good programs. She can help the children to analyze their own tastes and to understand their function as consumers of products advertised over the radio. The teacher may be interested in making a survey within her own classroom of what programs are enjoyed by her pupils. This might prove a starting point for discussions on what makes a good program or why certain programs are popular. Reports by individual pupils on programs they wish to recommend can be helpful to the class and may form a basis for discussion.

It is important in connection with commercial programs that the teacher refrain from sweeping condemnations of broadcasts which, from a cultured viewpoint, may seem trivial or even harmful. A cooperative approach in which pupil and teacher work together toward an understanding of what programs best fill the recreational needs of individuals will be found most effective.

Home radio listening is also an area in which it is important to establish a cooperative relationship between the school and the parents. Parental interest and concern in the field of radio may be assumed. It is necessary that parents know about the kinds of materials and experiences to which their children are being exposed by means of the radio. There are several techniques by which the teacher may utilize parental interest. Discussions of listening may be held at Parent-Teacher Association meetings. Ample opportunity should be provided for the parents to present their problems and points of view, and an attempt should be made to formulate a definite approach to radio which can be used both at home and in school. *A radio committee of parents might listen to suggested programs and report back to the larger group. The school might send out a bulletin prepared by pupils and teachers and listing suitable available programs. Parents might be invited to the classroom to listen with their children to school programs or to discussions of out-of-school broadcasts.*

Throughout Parent-Teacher discussions an attempt should be made to understand the situation from the point of view of the needs of the children and how these needs are being met. To try to *coerce* children into listening to certain programs, or to *forbid* them to listen to others may engender feelings of distrust, antagonism, and resentment. Each out-of-school listening problem involves a consideration of the needs of the child as a personality. The merits or demerits of a particular program may be a matter of relative unimportance. If a child listens to the radio four hours a day is it due to the ready availability of interesting programs, or is it because of lack of good books, lack of opportunities for out-door recreation, or lack of facilities for wholesome indoor activities? If a particular child suffers nightmares after a certain program is it the program which is to blame or is it some deeper disturbance in the child which is at the root of the matter? The discussion of questions like these may produce a very vital form of parent activity.

So far, little has been said of the opportunities for the teacher in out-of-school radio listening. The teacher who has become interested in radio in the classroom will wish to listen not only to keep herself informed in order to be able to help her students, but also because leisure-time listening can offer her a great deal of valuable cultural experience which she might not otherwise be able to obtain. Round-table discussions of current issues, newscasts, lectures, music, dramatizations, can contribute greatly in enriching and broadening her

experience not only as a teacher but as a distinctive personality.

EIGHT

WHAT PART CAN THE TEACHER PLAY IN THE PLANNING OF EDUCATIONAL BROADCASTS?

The use of radio implies more than a mere acceptance of the material which is piped into the classroom. Far from replacing the teacher, as many overzealous enthusiasts have predicted, the radio can be successful in the schools *only* with the unceasing aid and criticism of the classroom teacher and the pupils who listen. *It is only insofar as it meets their needs that its existence is justified.*

The necessity for discrimination in selecting a program has already been discussed. It is imperative to do more, however, than accept or reject programs already on the air. Teachers and pupils who are responsible critical listeners will do all they can to communicate their reaction to programs to broadcasters. Producers of programs are greatly dependent on this listener activity for determining the success or failure of their broadcasts. They are eager for any information they can obtain on the response of their audiences. Writing letters to the producers not only accomplishes this, but it helps the children to organize their ideas and provides one of the few ways in which they can take positive, constructive action. Teachers and pupils might also send in suggestions for programs they would like to hear, lists of questions they would like answered and samples of creative work reflecting their reactions to radio programs they have heard.

Although the actual writing of radio scripts and producing of programs must be done by professionally-trained people familiar with the techniques of radio,[1] educational programs should be planned around important educational objectives. In a few cases one finds teachers trained both in classroom procedures and in radio production actually planning programs, but until there are more of these it is the obligation of every teacher to make her educational needs and objectives clear to the people who produce radio programs. It is necessary first of all that these needs and objectives be very clearly defined in the teacher's own mind. Vague general criticisms do not help broadcasters nearly as much as concrete, well-thought-out comments and suggestions.

As the teacher uses radio systematically she will come to a deeper understanding of its shortcomings, and its possibilities. The results of this thinking must not be lost. If teachers are to play an active part in determining what radio will bring into the classroom their point of view must be communicated to broadcasters through letters, reports, and by participation in joint conferences. All teachers must be prepared to help radio achieve those broad educational objectives for which it is peculiarly fitted as an instrument of mass education.

NINE

HOW MAY TEACHERS LEARN MORE ABOUT RADIO IN EDUCATION?

Newspapers and Periodicals

All daily newspapers have a radio section which lists the time and station of programs carried locally. A special radio column sometimes gives descriptions of various programs. Some Sunday newspapers give a detailed listing of programs for the entire week.

Radio Guide, a weekly periodical which gives classified listings of programs a week in advance. A special section called "Listening to Learn" is devoted to notes about educational programs.

(1) See "How to Use Radio," also published by The National Association of Broadcasters, available through your local station, outlining important fundamentals for teachers and student-production groups contemplating the use of radio.

Pamphlets and Bulletins

Education by Radio, a monthly bulletin devoted to the discussion of educational radio policy. It also gives news notes about radio for educational, cultural and civic purposes. Mailed free upon request. National Committee on Education by Radio, One Madison Avenue, New York City.

Teaching by Radio, by R. R. Lowdermilk. A 48-page reprint of articles from the *Ohio Radio Announcer* during 1937-38. Free upon request to I. Keith Tyler, Ohio State University, Columbus, Ohio.

American School of the Air, Teachers' Manual. Guide to programs currently offered in social studies, literature, science and music. Mailed free upon request. American School of the Air, Columbia Broadcasting System, 485 Madison Avenue, New York City.

The Nation's School of the Air, Teachers' Manual. Guide to daily school broadcasts in various subjects. Mailed free upon request. The Nation's School of the Air, Station WLW, Cincinnati, Ohio.

NBC presents a comprehensive monthly bulletin containing descriptions and listings of National Broadcasting Company educational programs. Mailed free upon request. National Broadcasting Company, 30 Rockefeller Plaza, New York City.

Sources of Materials for Radio in Education. A new listing prepared by I. Keith Tyler and mailed free upon request to the author at Ohio State University, Columbus, Ohio.

Office of Education. There is now available a *Radio Manual, Glossary of Radio Terms, Handbook of Sound Effects,* and a catalog describing the Educational Radio Script Exchange. U. S. Department of the Interior, Office of Education, Washington, D. C.

The Art of Teaching by Radio, by Cline M. Koon. A discussion of different kinds of broadcasts, and the techniques that may be used for effective production of educational broadcasts. May be obtained for ten cents from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C.

Books

Radio in the Classroom, by Margaret Harrison. Practical guide in the use of radio in the school. It analyzes methods and techniques for utilizing radio programs and discusses units of work to which radio might contribute. Prentice-Hall Co., New York, 1937. List price: $2.50.

Radio, the Assistant Teacher, by Ben H. Darrow. A book for teachers with many excellent suggestions for the utilization of educational broadcasts. R. G. Adams and Company, Columbus, Ohio. List price: $1.90.

Listen and Learn, by Frank Ernest Hill. A very interesting survey of the entire field of radio. It would form a splendid background for teachers who are interested in radio, but it does not contain any specific suggestions for classroom use. American Association for Adult Education, New York, 1937. List price: $1.25.

Broadcasting and the Public—A Case Study in Social Ethics, by The Department of Research and Education of the Federal Council of the Churches of Christ in America. The Abingdon Press, New York, N. Y., 1938. List price: $1.50.

Educational Broadcasting 1937. Edited by C. S. Maret. Speeches and discussions at a conference of educators and broadcasters. The University of Chicago Press, Chicago, Ill., 1938. List price: $3.00.

Education on the Air 1938. Eighth Yearbook of the Institute for Education by Radio. Speeches and discussions at a conference of educators and broadcasters. Ohio State University, Columbus, Ohio, 1938. List price: $3.00.

(*Special Note*): Many city and state Boards of Education and national or regional educational organizations maintain a radio department. Additional information about local school broadcasts may be obtained from these sources, or from local radio stations.

For Latest Studies of Education in Radio, Address:

The Educational Department,
National Association of Broadcasters
1626 K St., N. W., Washington, D. C.

OTHER NAB PUBLICATIONS NOW AVAILABLE

THE ABC OF RADIO—So that the Average Listener May Understand How It Works in America. (Fifty pages, illustrated.)

HOW TO USE RADIO—Especially prepared for Civic Organizations and for the Teacher confronted with the problem of assembling material and people for the radio broadcast. (Forty-eight pages.)

SWING OR SYMPHONY?—Reprints of the letter of the BACH SOCIETY OF NEW JERSEY TO THE HON. FRANK R. McNINCH, Chairman of the Federal Communications Commission, together with his reply, with an inquiry into radio's effect on America's musical tastes.

IS YOUR HAT IN THE RING?—A pamphlet of practical suggestions for those in public life, full of helpful hints on the preparation and presentation of the Radio Talk.

NAB NEWS REVIEW—Reprints of timely articles from the press and periodicals pertaining to radio. Published six times a year.

IF I RAN THE B.B.C.—By J. B. Priestley, the distinguished English writer. Reprinted by special permission.

This literature is obtainable, free of charge, from any NAB member station in your own city.

NATIONAL ASSOCIATION
OF BROADCASTERS

Scanned from the National Association of Educational Broadcasters Records
at the Wisconsin Historical Society as part of
"Unlocking the Airwaves: Revitalizing an Early Public and Educational Radio Collection."

A collaboration among the Maryland Institute for Technology in the Humanities,
University of Wisconsin-Madison Department of Communication Arts,
and Wisconsin Historical Society.

Supported by a Humanities Collections and Reference Resources grant from
the National Endowment for the Humanities

MITH MARYLAND INSTITUTE FOR TECHNOLOGY IN THE HUMANITIES

UNIVERSITY OF MARYLAND

WISCONSIN HISTORICAL SOCIETY

WISCONSIN UNIVERSITY OF WISCONSIN–MADISON

NATIONAL ENDOWMENT FOR THE Humanities

Any views, findings, conclusions, or recommendations expressed in this publication/collection do not necessarily reflect those of the National Endowment for the Humanities.